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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,910	07/30/2003	Roy Lillqvist	060091.00217	6100
32294 7590 03/19/2009 SQUIRE, SANDERS & DEMPSEY L.L.P. 8000 TOWERS CRESCENT DRIVE 14TH FLOOR VIENNA, VA 22182-6212				
EXAMINER				
ADAMS, CHARLES D				
ART UNIT		PAPER NUMBER		
2164				
MAIL DATE		DELIVERY MODE		
03/19/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/629,910

**Applicant(s)**

LILLQVIST ET AL.

**Examiner**

CHARLES D. ADAMS

**Art Unit**

2164

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 15 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 15, 21-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

### *Remarks*

1. In response to communications filed on 24 November 2008, Applicant's arguments, with respect to the rejections of the claims under Tsukui et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bagley et al. in view of Khello et al.

Claims 1-11, 15, and 21-27 are pending in the application.

### *Claim Rejections - 35 USC § 101*

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-8, 11, and 21-27 are rejected under 35 U.S.C. 101.

Claims 1-8 are rejected under 35 U.S.C. 101 because the claims are directed towards a method, but a method is only patentable under 35 U.S.C. 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing. The use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility. The involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity; and that the transformation must be central to the purpose of the claimed process.

As to claims 11 and 21-27, the claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. Though an apparatus is claimed, no hardware exists in the claims. "Interfaces" and "Converters" may simply be software elements. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lawry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-186, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.>").

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11, 15, and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bagley et al. (US Patent 6,963,928) in view of Khello et al. (US Pre-Grant Publication 2003/0007482).

As to claim 1, Bagley et al. teaches a method, comprising:

receiving data to be supplied to database operations (see 8:20-36), the data including at least one Internet domain name comprising a plurality of successive labels (see 8:20-36)

Bagley et al. does not explicitly teach separated by dots,

Khello et al. teaches separated by dots (see paragraph [0058]). Khello et al. teaches to format a domain name in e164.arpa format into a telephone number by removing the dots and reversing the order of the digits. Bagley et al. teaches that to remove "all other characters not included in the translation table such as hyphens and underlines". As a period is not in the translation table, it is obvious that, with the teachings of Bagley et al., that character would be removed)

Bagley et al. as modified teaches:

said at least one Internet domain name being in a first format, wherein the at least one Internet domain name comprises at least one hostname and at least one top-level domain name (see Bagley et al. 8:20-36);

conditionally converting at least one of said at least one Internet domain name into a second format of Internet domain name in which at least two successive labels of the at least one of said at least one Internet domain name are combined for form a single label (see Bagley et al. 8:37-59), wherein the conditionally converting comprises converting the Internet domain name when the Internet domain name fulfills a predetermined condition (see Bagley et al. 8:29-59);

supplying the data to the database operations, the supplied data including at least one Internet domain name in the second format (see Bagley et al. 9:3-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bagley et al. by the teachings in Khello et al., because Khello et al. teaches that "the present invention provides an efficient way of resolving telephone numbers and other entity/device identifiers into Internet addresses as well as accommodating portability of those telephone numbers and other entity/device identifiers without having to substantially modify or rework the domain naming system infrastructure" (see Abstract). In addition to this, as stated above, Bagley et al. states that "all other characters not included in the translation table, such as hyphens or underlines, are ignored", and to remove those character. As periods are not in the translation table listed in 8:37-55, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to have removed periods from a string.

As to claims 2 and 21, Bagley et al. as modified teaches examining whether an Internet domain name fulfills the predetermined condition in the first format (see 8:37-59).

As to claims 3 and 22, Bagley et al. as modified teaches wherein the examining step includes examining whether said Internet domain name includes at least a predetermined number of labels beyond a given origin (see Bagley et al. 8:29-36, 8:60-9:2), said labels having a predetermined maximum length (see Khello et al. paragraph [0058] and Bagley et al. 6:47-67).

As to claims 4 and 23, Bagley et al. as modified teaches wherein the predetermined condition upon which the converting is conditional is whether the Internet domain name includes at least the predetermined number of labels beyond the given origin, such that the converting is performed for said Internet domain name when the examining indicates that the Internet domain name includes at least the predetermined number of labels beyond the given origin (see Bagley et al. 8:29-36, 8:60-9:2), said labels having the predetermined maximum length, and the converting is not performed when the examining indicates that the Internet domain name does not include at least the predetermined number of labels (see Bagley et al. 8:29-36, 8:60-9:2).

As to claims 5 and 24, Bagley et al. as modified teaches wherein the predetermined number of labels is three (see Bagley et al. 8:60-9:2 and 13:5-12).

As to claim 6 and 25, Bagley et al. as modified teaches wherein the predetermined maximum length is one byte (see Khello et al. paragraph [0058]).

As to claims 7 and 26, Bagley et al. as modified teaches wherein the predetermined maximum length is one byte (see Khello et al. paragraph [0058]).

As to claims 8 and 27, Bagley et al. as modified teaches:  
receiving data including another Internet domain name in the second format (see Khello et al. paragraph [0058]); and  
converting the another Internet domain name received in the second format back to the first format (see Khello et al. paragraph [0058]).

As to claim 9, Bagley et al. teaches:  
receiving means for receiving data to be supplied to database operations (see 8:20-36), the data including at least one Internet domain name comprising a plurality of successive labels

Bagley et al. does not explicitly teach separated by dots,  
Khello et al. teaches separated by dots (see paragraph [0058])



Bagley et al. as modified teaches said at least one Internet domain name being in a first format, wherein the at least one Internet domain name comprises at least one hostname and at least one top-level domain name (see 8:20-36);

converting means for conditionally converting at least one of said at least one Internet domain name into a second format of Internet domain name in which at least two successive labels of the at least one of said at least one Internet domain name are combined to form a single label (see Bagley et al. 8:29-59), wherein the second means is configured to convert the Internet domain name when the Internet domain name fulfills a predetermined condition (see Bagley et al. 8:29-59); and

supplying means for supplying the data to database operations, the supplied data including at least one Internet domain name in the second format (see Bagley et al. 9:3-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bagley et al. by the teachings in Kheloo et al., because Kheloo et al. teaches that "the present invention provides an efficient way of resolving telephone numbers and other entity/device identifiers into Internet addresses as well as accommodating portability of those telephone numbers and other entity/device identifiers without having to substantially modify or rework the domain naming system infrastructure" (see Abstract). In addition to this, as stated above, Bagley et al. states that "all other characters not included in the translation table, such as hyphens or underlines, are ignored", and to remove those character. As periods are not in the translation table listed in 8:37-55, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to have removed periods from a string.

As to claim 10, Bagley et al. teaches:

examining means for examining whether an Internet domain name fulfills the predetermined condition, the second means being configured to convert the Internet domain name into the second format when the Internet domain name fulfills the predetermined condition (see Bagley et al. 8:37-59).

As to claim 11, Bagley et al. teaches:

A first interface configured to receive data to be supplied to database operations (see 8:20-36), the data including at least one Internet domain name comprising a plurality of successive labels (see 8:20-36)

Bagley et al. does not explicitly teach separated by dots,

Khello et al. teaches separated by dots (see paragraph [0058]);

Bagley et al. as modified teaches said at least one Internet domain name being in a first format, wherein the at least one Internet domain name comprises at least one hostname and at least one top-level domain name (see Bagley et al. 8:20-36);

a converter configured to conditionally convert at least one of said at least one Internet domain name into a second format of Internet domain name in which at least two successive labels of the at least one of said at least one Internet domain name form a single label (see Bagley et al. 8:37-59), wherein the modification module is configured

to convert the Internet domain name when the Internet domain name fulfills a predetermined condition (see Bagley et al. 8:29-59); and

A second interface configured to supply the data to database operations, the supplied data including at least one Internet domain name in the second format (see 9:3-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bagley et al. by the teachings in Khello et al., because Khello et al. teaches that "the present invention provides an efficient way of resolving telephone numbers and other entity/device identifiers into Internet addresses as well as accommodating portability of those telephone numbers and other entity/device identifiers without having to substantially modify or rework the domain naming system infrastructure" (see Abstract). In addition to this, as stated above, Bagley et al. states that "all other characters not included in the translation table, such as hyphens or underlines, are ignored", and to remove those character. As periods are not in the translation table listed in 8:37-55, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have removed periods from a string.

As to claim 15, Bagley et al. teaches:

First interface means for receiving data to be supplied to database operations, the data including at least one Internet domain name comprising a plurality of successive labels (see 8:20-36)

Bagley et al. does not explicitly teach separated by dots;

Khello et al. teaches separated by dots (see paragraph [0058]);

Bagley et al. as modified teaches:

said at least one Internet domain name being in a first format, wherein the at least one Internet domain name comprises at least one hostname and at least one top-level domain name (see Bagley et al. 8:20-36);

Modification means for conditionally converting at least one of said at least one Internet domain name into a second format of Internet domain name in which at least two successive labels of the at least one of said at least one Internet domain name form a single label, wherein the modification means is configured to conditionally convert the Internet domain name when the Internet domain name fulfills a predetermined condition (see Bagley et al. 8:29-59); and

Second interface means for supplying the data to database operations, the supplied data including at least one Internet domain name in the second format (see Bagley et al. 9:3-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bagley et al. by the teachings in Khello et al., because Khello et al. teaches that “the present invention provides an efficient way of resolving telephone numbers and other entity/device identifiers into Internet addresses as well as accommodating portability of those telephone numbers and other entity/device identifiers without having to substantially modify or rework the domain naming system infrastructure” (see Abstract). In addition to this, as stated above,

Bagley et al. states that "all other characters not included in the translation table, such as hyphens or underlines, are ignored", and to remove those character. As periods are not in the translation table listed in 8:37-55, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have removed periods from a string.

### ***Response to Arguments***

6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES D. ADAMS whose telephone number is (571)272-3938. The examiner can normally be reached on 8:30 AM - 5:00 PM, M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. D. A./  
Examiner, Art Unit 2164

/Charles Rones/  
Supervisory Patent Examiner, Art Unit 2164